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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,485	08/16/2001	Timo Pinola	P 282822 T299007US/PYK/	9933
909	7590	06/25/2004	EXAMINER	
PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			NGUYEN, SIMON	
			ART UNIT	PAPER NUMBER
			2685	
			DATE MAILED: 06/25/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/930,485

Applicant(s)

PINOLA, TIMO

Examiner

SIMON D NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-21, 23-36, 38 is/are rejected.
- 7) ☒ Claim(s) 4, 22 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 5-7, 10-20, 23-25, 28-36, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naslund (6,223,031) in view of Niemela (5,978,675).

Regarding claim 1, Naslund discloses a method for testing channel of a base station in a cellular radio network (fig.1, 5, abstract), the method comprising: a base station (BS) transmits a control channel on at least one physical channel, directing a fixed receiver box (#201 of fig.5) to receive and measure the physical channel, transmitting a measurement report back to the controller, selecting good channel by the controller, and directing the base station to use at the good channel (fig.5, column 8 line 42 to column 11 line 8). However, Naslund does not specifically disclose that the tester located in a cell associated with the base station and a BSC controls the base station to transmit the control channel and the physical channel.

Niemela, the same type of the invention, discloses a system for monitoring the quality of audio signals (abstract) in which each base station having a test unit for measuring the quality of audio signals, wherein the test unit located in a cell associated with the base station but apart from the base station for receiving and transmitting

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signals to the base station (figs.1, 3), and wherein a controller (BSC) directing a base station to transmit the logical control channel so that the STM measures the transmitted logical control channel (column 3 lines 21-26, column 51-53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the Naslund system with the teaching of Niemela to directly involve in testing channels associated with the base station in order to improve the frequency planning in the system.

Regarding claims 19, this claim is rejected for the same reason as set forth in claim 1.

Regarding claims 2 and 20, in the modified Naslund discloses the base station tester is connected to the BSC via a fixed data network (figs.1, 5).

Regarding claims 5 and 23, in the modified Naslund system, Niemela discloses the STM is connected to the controller (BSC) via a wireless bi-directional data transmission link (figs.1, 3).

Regarding claims 6 and 24, Naslund discloses the base station tester is controlled in real time (dynamic channel allocation) (column 3 lines 39-48)).

Regarding claims 7 and 25, both Naslund and Niemela disclose the antenna of the channel measurement box being capable to receive one channel after another for testing ( $f_1$ - $f_n$  fig.5 of Naslund) ( $f_1$ -10 figs.1, 4 of Niemela) which is obvious the channel measurement box use directed antenna beams.

Regarding claims 10-11 and 28-29, Naslund discloses the channel configuration is performed when building the network at regular intervals (column 2 lines 32-48).

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Regarding claims 12, 14, 17, 30, 32, and 35, in the modified Naslund system, Naslund disclose a wireless system in which the base station having a measurement receiver (#201 of fig.5) for signal quality determination to be used in the system (figs. 1, 5, column 8 lines 42-67), wherein the system includes micro cells and macro cells (fig.3, column 13 lines 40-44) and a BCCH (column 2 line 1).

Regarding claims 13 and 31, the Naslund system discloses the base station is office base station (column 2 lines 63-65).

Regarding claims 15 and 33, in the modified Naslund system, Naslund discloses the BSC controls all activities in the base stations including the measurements of channels (figs.1, 5, column 11 lines 1-8).

Regarding claims 16 and 34, in the modified Naslund system, Naslund discloses the system includes a TDMA system with time slots (column 14 lines 50-54).

Regarding claims 18 and 36, in the modified Naslund system, Naslund discloses the base station tester placed in the premises of the user of the network (fig.5).

Regarding claim 38, this claim is rejected for the same reason as set forth in claim 1, wherein the measurement receiver box receives one channel after another via the antenna. however, both Naslund and Niemela does not specifically disclose the term "use directed antenna beam".

It should be noted that both Naslund and Niemela disclose the antenna of the channel measurement receiver box being capable to receive one channel after another (f1-fn fig.5 of Naslund) (f1-10 figs.1, 4 of Niemela) in a frequency hopping scheme which

is obvious the channel measurement receiver box use a directed antenna beam in order to receive different channels with only one antenna.

3. Claims 8-9 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naslund (6,223,031) and Niemela (5,978,675), and further in view of Molinari et al. (6,308,065).

Regarding claims 8 and 26, the modified Naslund system fails to disclose the base station tester is capable of receiving physical channels implemented in different ways.

Molinari discloses the base station tester is capable of receiving physical channels implemented in different ways (AMPS, TDMA, CDMA) (fig.4). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the modified Naslund, modified by Molinari to have a testing box applied for different communication systems in order to save cost of building a separated testing box for each kind of communication system.

Regarding claims 9 and 27, the modified Naslund does not specifically disclose the base station uses various power levels.

Molinari discloses the base station uses various power levels in transmitting the physical channel (column 7 line 52 to column 8 line 20). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the modified Naslund, modified by Molinari in order to improve the channel allocation in the communication system.

4. Claims 3 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naslund (6,223,031) in view of Niemela (5,978,675) and further in view of Rahman (6,445,916).

Regarding claims 3 and 21, the modified Naslund system fails to disclose the network including an IP network.

Rahman discloses a communication system in which the BS controller performs channel allocation to each base station based on uplink and downlink channel measurement at mobile stations and the base station (fig.1) wherein the network is an IP network (column 4 lines 36-50, column 5 lines 35-48). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the modified Naslund system, modified by the teaching of Rahman in order to easily track signal performance via Internet.

***Allowable Subject Matter***

5. Claims 4, 22, and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 4 and 22, the prior art of record does not specifically disclose the receiver box has its own IP address for receiving directions.

Regarding claim 37, this claim is objected as being dependent upon dependent claim 4 that has been objected.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (703) 308-1116. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

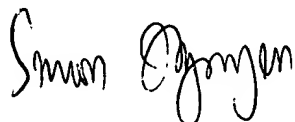
Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Simon Nguyen

June 21, 2004

A handwritten signature in black ink, appearing to read "Simon Nguyen", is written below the typed name and date.